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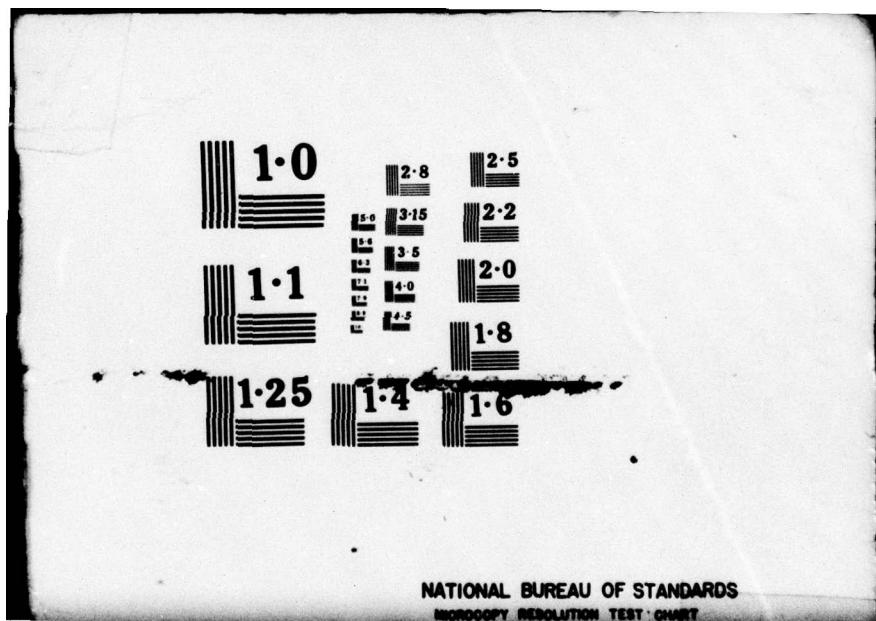
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NAVAL PROJECTION FORCES: THE CASE FOR A RESPONSIVE MAF

INTRODUCTION

The contingency of a short-warning, conventional attack by the Warsaw Pact against Central Europe poses one of the most severe defense problems facing the United States and its allies.¹ While the United States has taken initiatives to improve its forces already in Europe, little progress has been made in improving the rate at which U.S.-based reinforcements can be employed. Because reinforcement by sea is thought to take so long, Defense planners continue to look to additional airlift, rather than to sea lift, to help offset NATO's early deficit in forces. However, it is possible to improve the responsiveness of forces coming by sea. One such possibility is to employ the amphibious force earlier, rather than later, in a NATO contingency.

The argument is that with appropriate changes in fleet operations, a Navy projection force of MAF size can be about as responsive as airlifted Army forces.² Amphibious shipping, already in the Defense program, is sufficient to move the Assault Echelon (AE) of the East Coast Marine Amphibious Force (MAF) to Northern Europe in 14 to 16 days from the time of first warning. Assuming an additional 4 to 5 days to debark and to take up positions, a large Marine force could be fully employed in about 21 days. This response time compares favorably with estimates for airlift. For example, it might take 21 days or more for the U.S.-based, 2 1/3 Army divisions to fly to Europe, move to and draw their prepositioned

¹The combination of strategic nuclear parity and of Pact advantages in conventional forces relative to the forces of NATO has raised the importance of NATO planning for short-warning and for short-war contingencies. The seriousness of this problem and the likelihood of a continuing NATO deficit in conventional forces for the early defense of Central Europe reportedly was a central issue in the recent Presidential Review Memorandum #10, a review of national security strategy. Evans and Novak, "Conceding Defeat in Europe," The Washington Post, 3 August 1977, p. A-19.

²A Marine Amphibious Force (MAF) is a task-organized force built around a Marine division and a Marine air wing. The current Fleet Marine Force can task organize three MAFs from its active structure. They are II MAF on the East Coast, I MAF on the West Coast, and III MAF in Japan/Okinawa with an independent brigade in Hawaii. Although there are three MAFs, the programmed amphibious shipping will be adequate to lift the Assault Echelons (AE) of 1 1/3 MAFs.

equipment, and then move to their employment areas.³ Former Secretary of Defense, James Schlesinger, estimated in 1974 that about 19 days would be required to move the troops and the equipment of one Army division using only the airlift assets of the United States⁴.

The AE of a MAF has about 34,000 Marines, equipment and 15 days of consumables. With their own helicopter lift, Navy and Marine tactical air, and modern antitank weapons, the MAF would increase substantially the combat reinforcements available to SACEUR within the first month. For example, if it is assumed that the earliest of the Army reinforcements begin arriving in their combat areas with their equipment in the first week, the flow of Army reinforcements could reach 65,000, the equivalent of four divisions, by M+21.⁵ The addition of the MAF would raise the estimated reinforcements to 97,000. In terms of division equivalents, the MAF would represent about a 25 percent increase in reinforcements. However, to make an early contribution within the programmed budget, current Navy practices would have to change substantially.

To gain a responsive MAF, without expanding the amphibious fleet, routine peacetime deployments would have to be reduced or ended and three-fourths of the amphibious fleet would have to be concentrated in the Atlantic. This proposal poses a significant strategic choice. The choice is between continuing to operate with the priority on worldwide peacetime presence (foregoing any significant early participation in the defense of Europe with Marine

³ Robert Lucas Fischer, "Defending the Central Front: The Balance of Forces," Adelphi Paper No. 127, IISS, (London: 1976), p. 4.

⁴ U.S. Department of Defense, Annual Defense Department Report FY 1975, p. 158-159.

⁵ The assumption includes: (a) dedication of the airlift capacity of the United States, (b) a total movement time that encompasses assembly at airfields, flight time, movement from airfields to equipment storage areas (POMCUS sites), marry-up of troops and equipment, and movement to area of combat employment, (c) an average employment rate of 4,000 combatants per day from M+5 through M+20, of the 2 1/3 Army division equivalents, with prepositioned equipment, and an additional Army battalion plus equipment per day, (d) no enroute attrition of air or sea lines of communication and no interdiction of air or sea ports or the POMCUS storage sites.

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forces), or to emphasize the early defense of Europe deemphasizing peacetime presence. Amphibious assets are insufficient to do both. The alternatives and some of their implications are developed below.

CURRENT PRACTICE: PEACETIME PRESENCE AND A NATO RESERVE

Currently, there are 4 reinforced battalion-size Marine units in the routine deployment schedule. Two operate in the Western Pacific and two operate in the Atlantic/Mediterranean. They continue a pattern that goes back to 1948 in the Mediterranean, to 1959 in the Atlantic, and to 1960 in the Western Pacific.

Marine deployments are supported by the active amphibious fleet that is about equally divided between oceans. The present fleet of 62 ships is fully committed to the deployment schedule. It takes 4-6 ships for each Amphibious Ready Group (ARG/MAU) and a rotational backup of 2+ ships for each ship forward.⁶ By 1981, four new-construction ships (LHAs) will bring the active fleet to 66 ships. In addition to the active fleet, there are three Naval Reserve Fleet (NRF) ships and the AGF-LaSalle (an LPD) that might be available to support Marine forces in the future. Thus, the 1981 amphibious fleet could consist of 70 ships. Table 1 shows the approximate lift capacity of a 70-ship fleet, the requirements for lifting a Marine Amphibious Force (MAF), and the percentage of one MAF that the 70-ship fleet could lift simultaneously.

If current practices continue, the 1981 amphibious fleet will be divided about equally between the Atlantic and the Pacific oceans. An equal distribution of a 70-ship fleet will support the long-established pattern of deployments. However, it is insufficient to lift a MAF without swinging about 20 ships through the Panama Canal. For example, to move the East Coast MAF (II MAF) to Northern Europe, Atlantic-based ships would have the capacity to deliver about 60 percent of the Assault Echelon in about 16 days. The remainder of the MAF would then have to await shipping from the Eastern Pacific and the Western Pacific. These swing times are about 12 and 20 additional days respectively.⁷ Thus, the best time

⁶For a more detailed quantitative treatment of amphibious lift capabilities, see (CNA) Memorandum (CNA)76-3046, "Amphibious Lift Capabilities 1976 and 1980," Unclassified, Desmond P. Wilson, 30 Apr 1976.

⁷Closing times assume an 18 knot transit speed, an unobstructed Panama Canal, one day to transit the Canal, and seven days for the combined alert, assembly and loading of forces and ships at the ports of embarkation.

TABLE 1
1981 LIFT CAPABILITY
70 SHIPS

	<u>Troops</u>	<u>Vehicles thousands of sq. ft.</u>	<u>Cargo thousands of cu. ft.</u>	<u>Helo spots</u>	<u>Landing craft</u>
Net lift* available	44,000	840	1,620	368	440
1 MAF (AE) requirement	34,000	690	1,200	350	350
Percent 1 MAF (AE)	129	122	135	105	126

*Assumes that net lift reduces the gross lift by tactical integrity factors applied to troops and to vehicle square. In addition, there is a 10 percent ship nonavailability factor due to overhauls that is applied to all lift categories.

attainable for the last elements of the MAF (AE) to arrive in Northern Europe would be M+36. While this is the best time under the current mode of operating the fleet, it is not the best response time possible. The M+36 figure is an implicit preference for the current deployment practices and the concept of the Marines as a NATO reserve, over an alternative that would emphasize responsiveness to NATO.

THE ALTERNATIVE: A RESPONSIVE MAF

The responsive MAF concept differs from current practices by offering arrival times in Europe of 16 instead of 36 days. To accomplish this with the programmed fleet, roughly 54 amphibious ships--three quarters of the 1981 amphibious fleet--would have to be

concentrated in the Atlantic.⁸ Table 2 shows an equal distribution of the fleet and one alternative distribution to support the strategy of a responsive MAF. The 16 ships remaining in the Pacific would be enough to support 1 battalion-size unit (ARG/MAU) on routine forward deployments, or to lift a small brigade (MAB) on an intermittent basis.

TABLE 2

ALTERNATIVE DISTRIBUTIONS OF A
70-SHIP AMPHIBIOUS FLEET
1981

	Equal mix		Atlantic-heavy mix	
	Pacific	Atlantic	Pacific	Atlantic
Number of ships	35	35	16	54
Net lift available: portion of 1 MAF (AE)	~2/3	~2/3	~1/3	1

The Assault Echelon of II MAF is located within 100 miles of East Coast embarkation ports. By using organic vehicles and by flying the nonself-deployable aircraft to the ships, the AE could be fully loaded for combat within 7 days in that portion of the amphibious fleet that was located within 2-4 days steaming of the embarkation ports at the time of the alert. An additional 8 to 9 days would be required for the transit to Northern Europe for a total of about 16 days to arrive in an objective area for either an opposed or unopposed landing. Whether the MAF makes an unopposed landing over a beach or debarks at developed port facilities, it could be unloaded and moved to interior defensive positions in an additional 5 days, or by M+21.

⁸Calculations are based on MAF lift requirements as set forth in table 1. However, it should be noted that the MAF is a task-organized force and could be made smaller or larger with consequences for lift requirements. The complete MAF consists of the Assault Echelon (AE), the Assault Follow-On Echelon (AFOE), and a Fly In Echelon (FIE). The AE has the combat force and 15 days of supplies and would go in the amphibious ships. The AFOE is the supporting force for sustaining the combatants for an additional 45 days. Current plans call for the AFOE to move in merchant shipping. The responsiveness of the AFOE and the FIE is not considered in this analysis.

One way to view the contribution of an early-arriving MAF is to compare Marines, Army and allied forces assigned to divisions or divisional equivalents. Compared in this way, the Army has 4 divisions and 6 brigades for a total of 6 division-equivalents or about 84,000 in divisional manpower in Central Europe. As shown in table 3 airlift would add about another 65,000 by M+21 for a total of 149,000. To this latter figure, a 17,000-man Marine division would increase total U.S. divisional manpower by 11 percent and would represent 26 percent of the U.S. reinforcements capable of arriving with equipment and being in position in 21 days. Using the same divisional manpower as a basis for comparison, the Marine division would make about a 3 percent contribution to NATO's total mobilization potential (including France).

TABLE 3

MAF (AE) CONTRIBUTION TO EARLY
REINFORCEMENT OF CENTRAL EUROPE
(Manpower in U.S. Ground Combat Units*)

	<u>M Day</u>	<u>+7</u>	<u>+14</u>	<u>+21</u>	<u>+28</u>
U.S. w/o MAF	84,000	90,000	122,000	149,000	158,000
U.S. w/MAF	84,000	90,000	122,000	166,000	175,000
Percent increase	-	-	-	11	10

*Notes:

a. Based on the 17,000 Marines in division units. The Assault Echelon of a MAF totals about 34,000 and includes helicopters and other direct and indirect support.

b. Army manpower in ground combat units is based on troops in division equivalents.

c. Other than M Day, prepositioned-Army forces, all Army moves by airlift. Marines move by amphibious ships. Airlift of Army forces assumes 2 1/3 division-equivalents between M+7 and M+21, plus 1/11th division per day from M+5 onwards. Source: Fischer, op. cit., p. 23.

OTHER MILITARY CONSIDERATIONS

There are a number of other military issues implied by the proposal for using amphibious forces. These are discussed briefly below.

Flexibility. The early reinforcement of NATO with U.S. forces now relies exclusively on airlift. The responsive MAF concept would help diversify the means of movement and give SACEUR added flexibility to hedge against the uncertain course of a war. For example, the MAF offers flexibility in unloading. It could use many of the numerous European ports, or it could go ashore in most unimproved areas. Furthermore, it offers flexibility in employment. It might be employed alongside Army forces as a conventional infantry division, or it might be used in an early amphibious assault depending upon the needs at the time. The point is that the MAF could load out for an amphibious assault but could be committed in a number of different places as the situation evolves during the transit phase.

Amphibious Assault. The concept of the opposed amphibious landing has critics who doubt its viability, particularly in a NATO setting. However, the responsive MAF may improve the credibility and relevance of the amphibious concept. Historically, large landings have taken place after a considerable lapse of time from the beginning of a war. In a NATO/PACT war, a landing in the 2nd month or beyond may mean facing a mechanized opponent who has had time to consolidate defenses ashore and possibly mine the sea approaches to the landing sites. In contrast, the responsive MAF might contend for or counter preemptive grabs for territory of importance to both the sea and the land campaigns. The conflict situation might be similar to a meeting engagement except that the enemy forces would more likely be airborne or naval infantry and in the relative disarray of having just arrived. In short, some of the problems of an amphibious force going against a powerful opponent may be overcome by shortening the response times and by getting to an objective area earlier rather than later.

Vulnerability. The early use of sea lift is criticized for its vulnerability to submarines and to long-range aircraft. While the threat of interdiction is indeed significant, the relevant, but unanswered, questions have to do with the severity of the threat, and with the comparative capabilities of both sea and airlift systems to produce equipped reinforcements in forward areas. Air transport may be less vulnerable than sea transport. But, the problems with the airlift system are at the landing sites, the equipment storage sites, and with the intra-theater movement of troops to their equipment and onto their tactical positions. The essential point is that

both reinforcement systems are vulnerable. It is not obvious a priori that sea lift is more vulnerable than airlift. Both the relative and the absolute vulnerability of the two systems depends upon many uncertainties such as the amount of warning, submarine deployments and doctrine, and the quantity and quality of antisubmarine warfare and antiair warfare. Until more is understood about the severity of the interdiction threat, continuing to plan for the early reinforcement of NATO by whatever means is assumed preferable to withholding early reinforcements for some safer future.

Manpower. Another issue and an added reason for considering an alternative to the current amphibious force deployment routine is the difficulty of retaining trained personnel. To some extent the problem of retention is due to the turbulence that results when the supply of personnel is insufficient to meet routine afloat deployments and other commitments without excessive and disruptive transfers. This problem is apt to continue or to worsen in an environment characterized by all volunteers drawn from a declining youth population. Turbulence might be alleviated if the "demand" side of the problem was relaxed. Since the responsive MAF concept would trade off some of the routine peacetime deployments for quickly deployable, larger and more combat-capable Marine forces, turbulence might be favorably influenced.

Fleet Size. Planning the amphibious fleet is another issue that would be affected by the responsive MAF concept. The rationale for sizing the fleet rests on the lift requirements for a wartime assault, currently established at 1 1/3 MAFs. However, the use of the fleet differs substantially from this rationale and, as noted, incurs a penalty of deferred responsiveness with a MAF-size force. Reducing the differences between program rationale and actual use of the force could improve planning. Put differently, there is a need to clarify the role of amphibious forces, resolve issues of force structure and purpose, and to clarify the relationship between the size of the fleet and the size of the FMF. For example, to continue the emphasis on routine, forward-afloat deployments, the size of the fleet may be excessive or near the absorbable limit of the current FMF since Marine manpower is pressed to sustain the deployment schedule. On the other hand, if wartime assault with MAF-size forces is the direction that Navy/Marine Corps planners should follow, then the size of the programmed fleet may be minimal for the current size of the FMF.

THE STRATEGIC ISSUE

Amphibious forces can emphasize either a posture of peacetime presence and a deferred wartime responsiveness, or a posture of

wartime responsiveness and a reduced peacetime presence. Both cannot be pursued simultaneously with the human and material resources that are likely to be available to the Navy and to the Marine Corps.

The issue of strategic choice is important. Amphibious forces will cost about \$6 billion (ships and Marine forces) to operate in 1978, or roughly 7 percent of the budget for General Purpose Forces. Furthermore, the deficit in conventional forces in NATO is a real problem that has a high priority in U.S. defense planning. While a responsive MAF is not going to solve the reinforcement problem, a timely contribution on the order of a 10 percent-or-more increase in U.S. forces is not trivial. On the other hand, the opportunity cost of a responsive MAF is a Naval deemphasis of the Pacific. In particular, the template-like routine of forward-afloat deployments would change and Marine forces in the Pacific would have to rely more on airlift for their mobility. One of the important elements in making a rational choice is an assessment of a forward-afloat, peacetime presence.

The principal arguments for afloat deployments tend to be couched in terms of their symbolic contribution to deterrence and in terms of their responsiveness to local crises. Evaluating the first point, the deterrent value of an afloat Marine Amphibious Unit, is an extremely squishy problem. Like most naval presences, the significance of the afloat unit probably depends heavily upon the larger foreign policy context and thus varies with circumstances.⁹

The second argument, proximity to local crises, is a more empirically accessible question. In a list of 93 crises over the past 20 years, amphibious forces responded to 55 of them. However, most of the responses were in a permissive environment for humanitarian and evacuation purposes. There were no cases where afloat forces of MAU size acted in a combat situation without reinforcements from the United States or from other forward bases.¹⁰ If the forward-afloat force must wait for reinforcements, then the advantages of afloat proximity are lessened or lost. Furthermore, in the

⁹ A recent essay that discusses the changing environment for using military force is Klaus Knorr, "Is International Coercion Waning or Rising?", International Security, Spring 1977

¹⁰ A list of responses is in Robert B. Mahoney's "U.S. Navy Responses to International Incidents and Crises, 1955-1975," CRC 322, Vol. 1, (CNA) July 1977

humanitarian and evacuation missions, alert times frequently have been sufficient to organize a force and sail from the United States or other forward bases. In short, there are a number of effectiveness issues in connection with routine afloat deployments. In most regions of the world of the 1970s the MAU is too small to be a significant military force, but it may be too large to be an economical symbol of a peacetime presence. Nevertheless, routine, forward-afloat deployments supported by an equally divided fleet continue to be the principal peacetime activity of the amphibious force as it is with much of surface Navy.

CONCLUSIONS

↓ The responsive MAF concept:

- ↗ Improves arrival times in Europe by at least 20 days over the current mode of operating amphibious forces;
- ↗ Is an equal-cost alternative for employing the amphibious force. Excluding the one-time relocation costs of moving ships from the Pacific to the Atlantic, the responsive MAF could be implemented within the programmed, ship-procurement budget.
- ↗ Offers savings in added prepositioned equipment and airlift procurement to reduce the current deficit in early reinforcements for NATO;
- ↗ Diversifies and adds flexibility to the exclusive reliance on airlift for reinforcing NATO within the first 30 days; and
- ↗ Reduces the Navy's presence in the Pacific.

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